

CLAIMS

What is claimed is:

1. A method for a system infrastructure of a wireless communication system to accurately locate a communication device in the wireless communication system, the method comprising the steps of:
 - 1 determining an approximate geographic location of the communication device;
 - 2 transmitting to the communication device, based on the approximate geographic location, at least a request for a more accurate geographic location of the communication device;
 - 3 receiving from the communication device the more accurate geographic location; and
 - 4 conveying the more accurate geographic location to a target device.
2. The method of claim 1, further comprising the step of, prior to the step of determining the approximate geographic location of the communication device, receiving a request for a geographic location of the communication device from a requesting device, the request identifying the target device.
- 25 3. The method of claim 2, wherein the requesting device is the target device.
4. The method of claim 2, wherein the requesting device is the communication device.
- 30 5. The method of claim 1, wherein the step of transmitting further comprises the step of transmitting to the communication device a map of an area that includes the approximate geographic location of the communication device.

6. The method of claim 5, wherein the step of receiving the more accurate geographic location comprises the step of receiving information identifying a location of the communication device on the map.

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7. The method of claim 6, wherein the information identifying a location of the communication device on the map comprises a modified representation of the map indicating the location of the communication device.

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8. The method of claim 7, wherein the information identifying a location of the communication device on the map further comprises textual information and graphical information further identifying the location of the communication device.

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9. The method of claim 5, wherein the step of receiving the more accurate geographic location further comprises the step of receiving information identifying a second approximate location of the communication device on the map and a request for a second map corresponding to an area that includes the second approximate location, the second map being of a higher resolution than the map of the area that includes the approximate geographic location of the communication device, and wherein the method further comprises the step of transmitting the second map to the communication device.

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10. The method of claim 9, wherein the step of receiving the more accurate geographic location further comprises the step of receiving information identifying a location of the communication device on the second map.

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11. The method of claim 1, wherein the step of transmitting further comprises the step of transmitting to the communication device a textual description of an area that includes the approximate geographic location of the

5 communication device.

12. The method of claim 1, wherein the step of determining an approximate geographic location of the communication device comprises the steps of:

10 transmitting a request to the communication device for the approximate geographic location; and

receiving the approximate geographic location from the communication device responsive to the transmitted request.

15 13. The method of claim 1, wherein the step of conveying the more accurate geographic location to the target device comprises the step of conveying a map to the target device, wherein the map indicates the more accurate geographic location.

20 14. The method of claim 1, wherein the step of conveying the more accurate geographic location to the target device comprises the step of conveying a textual description of the more accurate geographic location to the target device.

25 15. The method of claim 1, wherein the more accurate geographic location includes information indicating a height of the communication device.

30 16. The method of claim 1, further comprising the steps of: determining a location of the target device; and conveying supplemental information related to both the location of the target device and the more accurate geographic location of the communication device to the target device.

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17. The method of claim 16, wherein the supplemental information is based on a distance between the communication device and the target device.

5 18. The method of claim 17, wherein the supplemental information comprises at least one of a city, a state, and a country when the communication device is located a substantial distance from the target device.

10 19. The method of claim 16, wherein the supplemental information comprises at least one of directions to the more accurate geographic location of the communication device from the location of the target device, an approximate distance between the more accurate geographic location of 15 the communication device and the location of the target device, and an approximate commute time between the location of the target device and the more accurate geographic location of the communication device.

20 20. The method of claim 1, further comprising the steps of: prior to the step of transmitting at least a request:
determining whether the approximate geographic location of the communication device is different than a previous approximate geographic location of the communication device; and

25 when the approximate geographic location of the communication device is different than a previous approximate geographic location of the communication device, automatically transmitting a map to the communication device, wherein the map corresponds to an area including the approximate geographic location of the communication device.

30 21. The method of claim 20, wherein the step of receiving the more accurate geographic location comprises the step of receiving information identifying a location of the communication device on the map.

22. A method for a communication device to assist a system infrastructure of a wireless communication system in providing an accurate geographic location of the
5 communication device to a target device, the method comprising the steps of:

receiving, from the system infrastructure, at least a request for an accurate geographic location of the communication device;

10 displaying the request to a user of the communication device;

receiving, from the user, the accurate geographic location of the communication device; and

15 transmitting the accurate geographic location to the system infrastructure for subsequent delivery to the target device.

23. The method of claim 22, wherein the step of receiving at least a request further comprises the step of receiving a
20 map of an area that includes an approximate location of the communication device.

24. The method of claim 23, wherein the step of displaying further comprises the step of displaying the map to the
25 user.

25. The method of claim 24, wherein the step of receiving the accurate geographic location further comprises the step of receiving an indication on the map corresponding to a
30 location of the communication device.

26. The method of claim 25, wherein the step of transmitting the accurate geographic location further comprises the step of transmitting a modified representation of the map that
35 includes the indication corresponding to the location of the communication device.

27. The method of claim 24, wherein the step of receiving the accurate geographic location further comprises the steps of:

receiving an indication on the map corresponding to a second approximate location of the communication device, the second approximate location being more accurate than the approximate location; and

receiving a request for a second map corresponding to an area that includes the second approximate location of the communication device, the second map being of a higher resolution than the map of the area that includes the approximate location of the communication device.

28. The method of claim 27, wherein the step of transmitting the accurate geographic location further comprises the step of transmitting the second approximate location of the communication device and the request for the second map.

29. The method of claim 28, further comprising the steps of:

receiving the second map;
displaying the second map to the user; and
receiving, from the user, an indication on the second map corresponding to a location of the communication device to produce the accurate geographic location of the communication device.

30. The method of claim 29, wherein the step of transmitting the accurate geographic location comprises the step of transmitting a modified representation of the second map that includes the indication corresponding to the location of the communication device.

31. The method of claim 22, wherein the accurate geographic location of the communication device includes information indicating a height of the communication device.

32. The method of claim 22, further comprising the steps of:

prior to receiving at least the request,

5 receiving a map of an area that includes an approximate geographic location of the communication device; and

storing the map in a memory of the communication device;

10 wherein the step of displaying comprises the step of automatically displaying the map responsive to receiving the request and wherein the step of receiving the accurate geographic location comprises the step of receiving an indication on the map corresponding to a location of the
15 communication device.

33. A method for a communication device to assist a system infrastructure of a wireless communication system in providing an accurate geographic location of the
20 communication device to a target device, the method comprising the steps of:

receiving, from the system infrastructure, a request for an accurate geographic location of the communication device and a map of an area that includes an approximate geographic location of the communication device;
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displaying at least the map to a user of the communication device;

receiving, from the user, an indication on the map corresponding to a location of the communication device; and

30 conveying the location of the communication device to the system infrastructure for subsequent delivery to the target device.

34. The method of claim 33, wherein the location of the communication device comprises information indicating a height of the communication device.
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35. A method for a communication device to assist a system infrastructure of a wireless communication system in providing an accurate geographic location of the communication device to a target device, the method
5 comprising the steps of:

receiving, from the system infrastructure, a request for an accurate geographic location of the communication device and a first map of an area that includes a first approximate geographic location of the communication device;

10 displaying at least the first map to a user of the communication device;

receiving, from the user, an indication on the first map corresponding to a second approximate geographic location of the communication device, the second approximate 15 geographic location being more accurate than the first approximate geographic location;

conveying the second approximate geographic location and a request for a second map to the system infrastructure;

20 receiving the second map from the system infrastructure, the second map corresponding to an area that includes the second approximate geographic location and being of a higher resolution than the first map;

displaying the second map to the user of the communication device;

25 receiving, from the user, an indication on the second map corresponding to a location of the communication device; and

30 conveying the location of the communication device to the system infrastructure for subsequent delivery to the target device.

36. A communication device comprising:

a receiver for receiving, from a system infrastructure of a wireless communication system, at least a request for an accurate geographic location of the communication device;

5 a display, operably coupled to the receiver, for displaying the request to a user of the communication device;

a user input device for receiving, from the user, information corresponding to the accurate geographic

10 location of the communication device; and

a transmitter, operably coupled to the user input device, for transmitting the accurate geographic location to the system infrastructure for subsequent delivery to a target device.

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37. The communication device of claim 36, wherein the at least a request includes a map of an area that includes an approximate location of the communication device.

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38. The communication device of claim 37, wherein the display further displays the map.

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39. The communication device of claim 38, wherein the information corresponding to the accurate geographic

location of the communication device comprises an indication on the map corresponding to a location of the communication device.

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40. The communication device of claim 36, wherein the user input device comprises at least one of a keypad, a computer mouse, a touchpad, a touchscreen, a trackball, and a keyboard.

41. A communication device comprising:

a receiver for receiving, from a system infrastructure of a wireless communication system, a request for an

5 accurate geographic location of the communication device and a map of an area that includes an approximate geographic location of the communication device;

10 a display, operably coupled to the receiver, for displaying at least the map to a user of the communication device;

a user input device for receiving, from the user, an indication on the map corresponding to a location of the communication device; and

15 a transmitter, operably coupled to the user input device, for transmitting the location of the communication device to the system infrastructure.

42. The communication device of claim 41, wherein the user input device comprises at least one of a keypad, a computer

20 mouse, a touchpad, a touchscreen, a trackball, and a keyboard.